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Subject: Bark Beetle Activity in Recreation Sites on the Lakeside RD (lakesiderd)

To: District Ranger, Lakeside RD

On September 1, 2006, I traveled to the Lakeside Ranger District (RD), Apache-Sitgreaves National Forests (NFs) to evaluate prevention and suppression projects in their recreation sites. I describe in this report what bark beetle activity was observed in these areas, summarize the effectiveness of the preventive treatments, and make recommendations to minimize bark beetle impacts in the future. A full description of prevention and control alternatives was described in previously submitted site visit reports in 2002 – 2005.

I examined four developed recreation sites and one administrative site on September 1st. My surveys of the four recreation sites consisted of walkthroughs looking for fading trees, pitch tubes, and boring dust. It is important to note that a more intensive survey may find additional infested trees and additional trees may have become infested after my survey was completed. Therefore, the numbers of infested trees reported here should not be considered absolute.

Lakeside Campground – Three previously infested, small-diameter pines were found in the campground. Attacked in late 2005 or early 2006, beetles had already emerged from these trees by the time my survey was conducted. None of the trees sprayed with preventative insecticides in previous years were attacked.

Scott Reservoir Campground – No current bark beetle activity was observed at this recreation site.

Fool Hollow Lake – Five current infested and 23 previously infested ponderosa pine trees were found on the Park grounds. Trees were attacked by both western pine beetle and pine engraver beetles (*Ips* species). None of the trees sprayed with preventative insecticides were attacked.

Lewis Group Area – No current bark beetle activity was observed within the boundaries of this recreation site. Low to moderate levels of bark beetle activity were observed in forested areas adjacent to the campground. Many of the severely fire-damaged trees in these adjacent areas have begun to break or fall to the ground (***Figure 1***).

Figure 1. *Failure of fire-damaged ponderosa pine adjacent to Lewis Canyon Group Area.*

Pinedale Work Center – No current bark beetle activity was observed at this administrative site.

Recommendations

Ponderosa pine trees were sprayed with carbaryl-based preventative insecticides (Sevin SL or Carbaryl 4L) at recreation across the Lakeside District during April 2006. None of the 1,566 sprayed trees at Fool Hollow Lake or Lewis Canyon Group camping areas were successfully attacked by bark beetles despite moderate beetle pressure in the areas being treated. Therefore, the spray treatments continued to be very effective at preventing trees from being successfully attacked by beetles.

Based on the current low level of bark beetle activity within the immediate area of most developed recreation sites on the Lakeside RD, I do not feel that spraying of high value trees is necessary in 2007. Because many trees at Lewis Canyon Group Campground and adjacent area were damaged by the Rodeo-Chediski Fire, beetle activity continues to slightly higher in this area than at other sites. However, even in this area the amount of new bark beetle-caused tree mortality has declined from previous years.

In the short-term, prompt removal of currently infested trees will help to reduce the immediate local population of beetles. It is recommended that the infested trees be removed yet this winter before the brood completes their development and adult beetles emerge in the spring. Felling of infested trees will not kill developing brood; infested trees must either be removed from the site or treated on site.

When carrying out thinning prescriptions, careful management of the slash should be considered while bark beetle populations are high. Removal of thinning slash from the recreation areas is the best option. If treated on-site, burning, chipping, or burying green will help to reduce the potential for an additional population increase of beetles. It is recommended that the infested trees be removed or treated before early spring (i.e., by April 1st), which is prior to the brood completing their development and adult beetles emerge.

If you have any questions regarding my assessment of current bark beetle activity or my recommendations, please let me know. I can be reached at (928) 556-2074.

/s/ Joel D. McMillin
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